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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/708,397 | 02/29/2004 | Chung-Yuo Wu | MSCP0020USA | 2396 |
| 27765 | 7590 | 06/07/2007 | EXAMINER | |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116 | | | LARYEA, LAWRENCE N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3768 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 06/07/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
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mis.ap.uspto@naipo.com.tw

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|------------------------------|---------------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/708,397 | Applicant(s) WU ET AL. | |
| | Examiner Lawrence N. Laryea | Art Unit 3768 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 0207.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/13/06 11/3/06
09/15/06 1/15/07.

DETAILED ACTION

Examiner acknowledges Applicant's amendment and remarks filed March 14, 2007.

Applicant's arguments with respect to the rejection(s) of claim(s) 1-6 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by **Paltieli (Patent 5647373)**.

3. Re Claims 1-2: **Paltieli** teaches an injection device for detecting the position of a vein (target) of an examinee and injecting comprising: a housing (**See Fig.1**) where a pulse ultrasound probe (**4**) installed in front of the housing, and a microprocessor (**32**) installed in the housing wherein the pulse ultrasound probe comprises an oscillator for emitting a pulse ultrasonic signal toward the examinee along the direction of the housing and a sensor for receiving the ultrasonic signals reflected by the examinee and converting the reflected signals into electric signals to output to the microprocessor (**See**

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Col. 7, lines 1-10 Col. 7, lines 31-35); a propeller which is made up of two servo-motors (**motors,25 and 45**) is capable of moving the house along the direction of the pulse ultrasonic signals (**aiming position which could be parallel direction**) (**See Col. 4, lines 56-57**); and a syringe(needle) coupled to the propeller (**See Col. 4, lines 65-67**), to move along the direction of the pulse ultrasonic signals by the propeller (**See Col. 3, lines 14-20**).

4. Re Claim 3: **Paltieli** teaches an injection device wherein the propeller (**25**) comprises a clipper (**See fig.5 for clippers 8,42,43,44,45,23 and 40**) for clipping the needle coupled to the housing in order to convey the clipper with respect to the housing along the direction of the pulse ultrasonic signals (**Col. 4, lines 35-38 Col. 4, lines 57-61 and See Fig. 1**).

See In re Venner, 262 F2d 91,95 120 USPQ 192, 194 (CCPA 1958)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Paltieli** in view of **Akhavi (Patent 4317455)**.

7. Re Claims 4,5 and 6: **Paltieli** disclose an injection device for detecting the position of a vein (target) comprising a pulse ultrasound probe, a sensor, a

microprocessor and a propeller for moving a housing along the direction of the pulse ultrasonic signals probe and a clipper that clips the needle (**Col. 4, lines 35-38 Col. 4, lines 57-61 and See Fig. 1**) but does not that the medical injection device has a cover that covers the front end of the housing and the inner wall of the housing and an aperture is formed on the housing to contain the clipper inside an inner wall of the housing.

8. Re Claim 5 **Akhavi** discloses a medical injection device that has a cover (15) that covers the front end of the housing and the inner wall of the housing or the needle (**See Col. 2, lines 15-17 and Fig.2**).

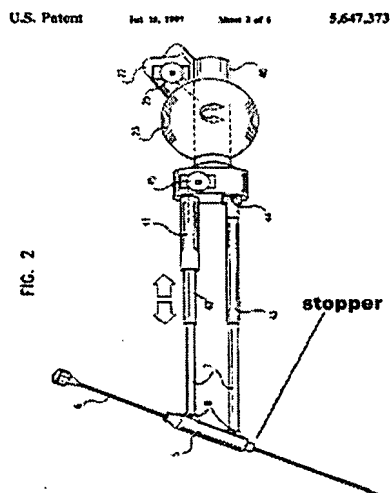
It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the medical injection device of **Paltieli** to include a covers that covers the front end of the housing and the inner wall of the housing or the needle similar to that **Akhavi** in order to protect and prevent the needle from infection, germs and damages.

9. Re Claim 4, Applicant has not disclosed that "an aperture is formed on the housing to contain the clipper inside an inner wall of the housing" provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the clipper of **Paltieli**, and applicant's invention to perform equally well with or without an aperture formed on the housing to contain the clipper, as any form of clipper, would perform or yield the same function of movement of the needle (syringe) to any desired locations where ultrasonic signals occurred.

Therefore, it would have been prima facie obvious to modify **Paltieli** to obtain the invention as specified in claim 4 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of **Paltieli**.

10. Re Claim 6: **Paltieli** teaches an injection device wherein a stopper is formed at a predetermined distance from the front end on the inner wall of the housing in order to stop the clipper at a predetermined depth. It is inherent to have a stopper on a needle in order to target required positions and depths on human body during medical diagnostics.

See diagram below for a stopper



See In re Venner, 262 F2d 91,95 120 USPQ 192, 194 (CCPA 1958)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang et al (Patent 6695786) disclose an invasive medical device wherein a needle moves along a parallel the direction of the pulse ultrasonic signals.

Schwartz (Patent 6056690) disclose an intravenous location device comprising a pulse ultrasound probe, a sensor and microprocessor which is configured with propeller (motor) to move (x-y directions) according to predetermined levels in respect to the signals received (reflected) from the pulse ultrasound probe.

Paltieli (Patent 6311540) disclose an intravenous location device comprising a pulse ultrasound probe, a sensor and microprocessor which is configured with propeller to move in respect to signals from the pulse ultrasound probe.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 9:30 a.m.-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNL


ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER